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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,559	03/29/2005	Uwe Schwarz	60091.00379	7870

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EXAMINER	
YOUNG, JANELLE N	
ART UNIT	**PAPER NUMBER**
2618	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/529,559	SCHWARZ ET AL.	
	Examiner	Art Unit	
	Janelle N. Young	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 July 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33 and 35-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33 & 35-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 31, 2007 has been entered.

Response to Amendment

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 12, 14, 16-21, 28, 30, and 32-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Meskanen et al. (US Patent 6434389).

As for claim 1, Meskanen et al. teaches a radio resource control method in a mobile communication system, comprising:

camping, in an idle state, on the a serving cell formed by a serving base station (Col. 1, lines 34-35 ; Col. 3, lines 39-53; and Col. 7, lines 19-21 of Meskanen et al.);

manipulating; which reads on claimed adjusting, in a network element of the mobile communication system ~~before the control information is received~~, at least one element of said control information according to a predetermined time pattern comprising time elements having a characteristic profile in terms of the state of the mobile communication system, thus forming adjusted control information, wherein the control information controls cell change procedures of a user equipment camping in the idle sate on the serving cell (Abstract; Col. 3, lines 1-22; and Col. 9, lines 19-30 of Meskanen et al. with respect to Col. 1, lines 34-35 and Col. 7, lines 19-21); ~~and~~

receiving, in the user equipment, the control information for controlling cell change procedures of the user equipment, said cell change being conducted from the serving cell to the best; which reads on claimed target, cell (Col. 3, line 1-Col. 4, line 59; Col. 5, lines 50-65; Col. 7, lines 14-45; and Col. 8, lines 41-52 of Meskanen et al.);

performing, in the user equipment, the cell change procedures based on the received control information (Col. 3, lines 1-22 & 39-53 of Meskanen et al.); and

controlling the cell change procedures based on said adjusted control information, wherein at least one adjacent; which reads on claimed neighbor, cell

is formed by a neighbor base station and the user equipment capable of receiving signals from said base stations (Abstract; Col. 1, lines 34-35; Col. 3, lines 1-22; and Col. 4, lines 34-59 of Meskanen et al.).

As for claim 2, Meskanen et al. teaches a radio resource control method in a mobile communication system comprising of adjusting at least one element of the idle state control information (Abstract; Col. 1, lines 14-56; and Col. 5, lines 21-38 of Meskanen et al.).

As for claim 3, Meskanen et al. teaches a radio resource control method in a mobile communication system comprising:

selecting the target cell based on the adjusted control information; and camping on the best; which reads on claimed target, cell (Abstract; Col. 3, lines 1-53; and Col. 4, lines 34-59 of Meskanen et al.).

As for claim 4, Meskanen et al. teaches a radio resource control method in a mobile communication system comprising:

measuring the quality of the serving cell; measuring the quality of at least one neighbor cell; listing or ranking the measured cells based on the measured quality of the serving cell and the measured quality of the neighbor cell; and selecting the target cell based on the ranking (Abstract; Col. 3, line 60-Col. 4, line 33; Col. 5, line 66-Col. 6, line 32; Col. 7, lines 1-45; Col. 8, lines 41-52 of Meskanen et al.).

As for claim 5, Meskanen et al. teaches a radio resource control method in a mobile communication system comprising:

measuring the quality of the serving cell; triggering measurements on the neighbor cell based on the measured quality of the serving cell and the quality threshold of the serving cell; and selecting the target cell based on the triggered measurements (Col. 3, line 60-Col. 4, line 33; Col. 5, line 66-Col. 6, line 32; Col. 7, lines 1-45; Col. 8, lines 41-52 of Meskanen et al.).

As for claim 12, Meskanen et al. teaches a radio resource control method in a mobile communication system comprising of adjusting at least one element of the control information to assumed capacity requirements of the mobile communication system (Abstract and Col. 2, line 64-Col. 4, line 59 of Meskanen et al.).

As for claim 14, Meskanen et al. teaches a radio resource control method in a mobile communication system comprising:

camping, on the serving cell belonging to the same hierarchical cell structure as the neighbor cell; adjusting the prioritizing information of hierarchical (the hierarchy can be based on speed, cost, quality of service, traffic, etc. as a programmable parameter) cell structure; re-prioritizing the cells in a hierarchical cell structure using the adjusted prioritizing information; and performing the cell change procedures based on the re-prioritizing information (Abstract; Col. 2, lines 64-67; Col. 3, line 60-Col. 4, line 59; Col. 7, lines 1-45; Col. 8, lines 42-52; and Col. 9, lines 3-13 of Meskanen et al.).

As for claim 16, Meskanen et al. teaches a radio resource control method in a mobile communication system comprising of camping on the serving cell controlled by a base station controller different from the base station controller controlling the neighbor

cell (Col. 5, lines 22-38 & 50-65 in respect to Col. 1, lines 34-35 and Col. 7, lines 19-21 of Meskanen et al.).

Regarding claim 17, see explanation as set forth regarding claim 1 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 18, see explanation as set forth regarding claim 2 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 19, see explanation as set forth regarding claim 3 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 20, see explanation as set forth regarding claim 4 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 21, see explanation as set forth regarding claim 5 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 28, see explanation as set forth regarding claim 12 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 30, see explanation as set forth regarding claim 14 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 32, see explanation as set forth regarding claim 16 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 33, see explanation as set forth regarding claim 1 (method claim) because the claimed network element for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 34, see explanation as set forth regarding claim 1 (method claim) because the claimed mobile communication system for radio resource control would perform the method steps.

As for claim 35 (new), Meskanen et al. teaches a radio resource control method in a mobile communication system, comprising:

providing, in a network element of a mobile communication system, control information controlling cell change procedures of user equipment camping in an idle state on a serving cell formed by a base station (Col. 3, lines 1-22 & 39-53 of Meskanen et al.);

manipulating; which reads on claimed adjusting, at least one element of said control information according to a predetermined time pattern comprising time elements having a characteristic profile in terms of the state of the mobile

communication system, thus forming adjusted control information (Abstract; Col. 3, lines 1-22; and Col. 9, lines 19-30 of Meskanen et al.);

transmitting the adjusted control information to the user equipment (Col. 3, line 54-Col. 4, line 59 and Col. 5, lines 50-65 of Meskanen et al.); and

controlling the cell change procedures based on said adjusted control information (Abstract; Col. 1, lines 34-35; Col. 3, lines 1-22; and Col. 4, lines 34-59 of Meskanen et al.).

Regarding claim 36 (new), see explanation as set forth regarding claim 35 (method claim) because the claimed network element of a mobile communication system would perform the method steps.

Regarding claim 37 (new), see explanation as set forth regarding claim 35 (method claim) because the claimed network element of a mobile communication system would perform the method steps.

Regarding claim 38 (new), see explanation as set forth regarding claim 35 (method claim) because the claimed computer program embodied on a computer readable medium, the computer program comprising program code would perform the method steps.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 7-11 and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meskanen et al. (US Patent 6434389) as applied to claim 1 above, and further in view of Kuo et al. (US Patent 6181943).

As for claim 7, Meskanen et al. a method for selecting cell in cellular network; which reads on claimed a radio resource control method in a mobile communication system comprising of camping, in an idle state, on the a serving cell formed by a base station (Col. 1, lines 34-35 and Col. 7, lines 19-21 of Meskanen et al.). In addition, Meskanen et al. teaches radio resource control method in a mobile communication system, comprising of controlling the cell change procedures based on manipulating/adjusted broadcasting; which reads on claimed control, information (Col. 1, lines 20-23 of Meskanen et al., wherein at least one neighbor cell is formed by a neighbor base station and the user equipment capable of receiving signals from said base stations (Abstract; Col. 3, lines 1-53; Col. 4, lines 34-59; Col. 7, lines 14-45; and Col. 8, lines 41-52 of Meskanen et al.).

What Meskanen et al. does not explicitly teach is the inter-frequency; which is interpreted as a type of inter-radio access technology, and offset for planning a radio resource control method in a mobile communication system.

However, Kuo et al. teaches a radio resource control method in a mobile communication system comprising of camping on the serving cell that uses a different radio-access technology from that used by the neighbor cell; adjusting an is the inter-frequency; which is interpreted as a type of inter-radio access technology, measurement

threshold; and wherein performing the cell change procedures comprises: measuring the quality of the serving cell; triggering inter-radio access technology measurements on the neighbor cell based on the measured quality of the serving cell and the is the inter-frequency; which is interpreted as a type of inter-radio access technology, measurement threshold; and selecting the target cell based on the is the inter-frequency; which is interpreted as a type of inter-radio access technology, measurement (Abstract; Col. 3, lines 3-48; and Col. 6, lines 16-44 of Kuo et al.).

It would have been obvious to one of ordinary skill of the art at the time the invention was made to incorporate a apparatus and methods to allow a change of is the inter-frequency; which is interpreted as a type of inter-radio access technology, even between uncoordinated radio access networks, as taught by Kuo et al., in Abstract, in the method for selecting cell in cellular network of Meskanen et al. because Meskanen et al. already teaches telecommunication networks of the GSM type (Col. 5, lines 9-38 and Col. 6, lines 16-32 & 53-67 of Meskanen et al.).

The motivation of this combination would be the effect the quality of handoff from an existing call connection frequency to a new frequency, as taught by Kuo et al. and Meskanen et al., because the cells on which said terminal can camp in idle mode or dedicated mode, controlled by base stations intended to manage such switching when a communication is established. The incorporation of the radio resource control methods in a mobile communication system would allow the integration of differing mobile telecommunications systems, in particular for detecting, monitoring and accessing radio

networks and easier changing of radio access technologies even between uncoordinated radio access networks.

As for claim 8, Kuo et al. teaches a radio resource control method in a mobile communication system comprising:

measuring the quality of the serving cell; triggering measurements on the neighbor cell based on the measured quality of the serving cell; measuring the quality of the neighbor cell; forming the candidate cell selection based on the measured quality of the neighbor cell and the quality threshold of the neighbor cell; and selecting the target cell based on the candidate cell selection (Abstract; Col. 3, lines 3-56; and Col. 6, lines 16-44 of Kuo et al.

As for claims 9-10, Kuo et al. teaches a radio resource control method in a mobile communication system comprising:

measuring the quality of the serving cell, applying the quality offset of the serving cell to the measured quality of the serving cell, thus obtaining an offset-applied quality of the serving cell; measuring the quality of at least one neighbor cell; and selecting the target cell based on the measured quality of the neighbor cell, and the offset-applied quality of the serving cell and neighbor cell (Abstract; Col. 4, line 66-Col. 5, line 17; Col. 6, lines 15-44; and Col. 7, lines 4-18 of Kuo et al.).

As for claim 11, Kuo et al. teaches a radio resource control method in a mobile communication system comprising:

measuring the quality of the serving cell; measuring the quality of at least one neighbor cell; applying the quality offset of the neighbor cell to the measured quality of the neighbor cell for the duration of the penalty time, thus obtaining a temporary offset-applied quality of the neighbor cell; and selecting the target cell based on the measured quality of the serving cell and the temporary offset-applied quality of the neighbor cell (Abstract; Col. 1, lines 43-56; Col. 2, lines 45-62; Col. 4, line 66-Col. 5, line 17; Col. 6, lines 15-44; and Col. 7, lines 4-18 of Kuo et al.).

Regarding claim 23, see explanation as set forth regarding claim 7 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 24, see explanation as set forth regarding claim 8 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 25, see explanation as set forth regarding claim 9 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 26, see explanation as set forth regarding claim 10 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 27, see explanation as set forth regarding claim 11 (method claim) because the claimed system for radio resource control in a mobile

communication system would perform the method steps.

4. Claims 6 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meskanen et al. (US Patent 6434389) as applied to claim 1 above, and further in view of Coutant (US Patent 2002/0173275).

As for claim 6, Meskanen et al. a method for selecting cell in cellular network; which reads on claimed a radio resource control method in a mobile communication system comprising of camping, in an idle state, on the a serving cell formed by a base station (Col. 1, lines 34-35 and Col. 7, lines 19-21 of Meskanen et al.). In addition, Meskanen et al. teaches radio resource control method in a mobile communication system, comprising of controlling the cell change procedures based on manipulating/adjusted broadcasting; which reads on claimed control, information (Col. 1, lines 20-23 of Meskanen et al., wherein at least one neighbor cell is formed by a neighbor base station and the user equipment capable of receiving signals from said base stations (Abstract; Col. 3, lines 1-53; Col. 4, lines 34-59; Col. 7, lines 14-45; and Col. 8, lines 41-52 of Meskanen et al.).

What Meskanen et al. does not explicitly teach is the use of different carrier frequency for planning a radio resource control method in a mobile communication system.

However Coutant teaches a radio resource control method in a mobile communication system adjusting at least one inter-frequency measurement threshold; and wherein performing the cell change procedures comprises of camping on the

serving cell that uses a different carrier frequency from that used by the neighbor cell. (Page 3, Para 0043, 0045, & 0051 of Coutant).

It would have been obvious to one of ordinary skill of the art at the time the invention was made to incorporate the method for selecting cell in cellular network of Meskanen et al. (Abstract; Col. 5, lines 9-38; and Col. 6, lines 16-32& 53-67 of Meskanen et al.), in the radio resource control method in a mobile communication system that uses a different carrier frequency of Coutant, because Coutant already teaches telecommunication networks of the GSM type (Abstract and Page 3, Para 0043 & 0051 of Coutant).

The motivation of this combination would be the effect of switching from idle mode to dedicated mode when a communication is established and a plurality of cells in a telecommunication network, as taught by Coutant and Meskanen et al., because the cells on which said terminal can camp in idle mode or dedicated mode, controlled by base stations intended to manage such switching when a communication is established.

The incorporation of the radio resource control methods in a mobile communication system would allow the integration of differing mobile telecommunications systems, in particular for detecting, monitoring and accessing radio networks and easier changing of radio access technologies even between uncoordinated radio access networks.

Regarding claim 22, see explanation as set forth regarding claim 6 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

5. Claims 13, 15, 29, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meskanen et al. (US Patent 6434389) as applied to claim 1 above, and further in view of Lescuyer et al. (US Patent 2004/0147262).

As for claim 13, Meskanen et al. a method for selecting cell in cellular network; which reads on claimed a radio resource control method in a mobile communication system comprising of camping, in an idle state, on the a serving cell formed by a base station (Col. 1, lines 34-35 and Col. 7, lines 19-21 of Meskanen et al.). In addition, Meskanen et al. teaches radio resource control method in a mobile communication system, comprising of controlling the cell change procedures based on manipulating/adjusted broadcasting; which reads on claimed control, information (Col. 1, lines 20-23 of Meskanen et al., wherein at least one neighbor cell is formed by a neighbor base station and the user equipment capable of receiving signals from said base stations (Abstract; Col. 3, lines 1-53; Col. 4, lines 34-59; Col. 7, lines 14-45; and Col. 8, lines 41-52 of Meskanen et al.).

What Meskanen et al. does not explicitly teach is the idle states for planning a radio resource control method in a mobile communication system.

However, Lescuyer et al. teaches a radio resource control method in a mobile communication system comprising a serving cell formed by a serving base station, at least one neighbor cell formed by a neighbor base station, and user equipment capable of receiving signals from said base stations, further comprising adjusting at least one element of the control information based on assumed cell load of the serving cell (Page

3, Para 0003-0011; Page 2, Para 0025; Page 4-5, Para 0061; and Page 6, Para 0072 of Lescuyer et al.).

It would have been obvious to one of ordinary skill of the art at the time the invention was made to incorporate a apparatus and methods to allow a change of radio access technology even between uncoordinated radio access networks, as taught by Lescuyer et al. in Page 6, Para 0050, in the method for selecting cell in cellular network of Meskanen et al. because Meskanen et al. already teaches telecommunication networks of the GSM type (Col. 5, lines 9-38 and Col. 6, lines 16-32& 53-67 of Meskanen et al.).

The motivation of this combination would be the effect of switching from idle mode to dedicated mode when a communication is established and a plurality of cells in a telecommunication network, as taught by Meskanen et al., because the cells on which said terminal can camp in idle mode or dedicated mode, controlled by base stations intended to manage such switching when a communication is established.

The incorporation of the radio resource control methods in a mobile communication system would allow the integration of differing mobile telecommunications systems, in particular for detecting, monitoring and accessing radio networks and easier changing of radio access technologies even between uncoordinated radio access networks.

As for claim 15, Lescuyer et al. teaches a radio resource control method in a mobile communication system comprising of camping in one of the following idle states specified in the third generation partnership project specifications: idle mode,

CELL_FACH state, URA_PCH state, CELL_PCH state (Page 5, Para 0062 and Page 6, Para 0077 of Lescuyer et al.).

Regarding claim 29, see explanation as set forth regarding claim 13 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 31, see explanation as set forth regarding claim 15 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle N. Young whose telephone number is (571) 272-2836. The examiner can normally be reached on Monday through Friday: 8:30 am through 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JNY
September 21, 2007

NAY MAUNG
SUPERVISORY PATENT EXAMINER